

CATEGORIZING SYSTEM CRITICALITY GUIDELINE FOR UTM HEALTH CENTRE

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CENTRE

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A project report submitted in partial fulfillment of the
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I declare that this project report entitled “*Categorizing System Criticality Guideline for UTM Health Centre*” is the result of my own research except as cited in the references. The project report has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.

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This project is dedicated to my beloved and respected parents, supervisor and my beautiful wife for their endless love, support and encouragement. Thank you for the moral support and guidance given throughout my academic life.

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ABSTRACT

Categorization of system criticality is an approach of asset identification and classification regarding to the importance and the impact of its absence to the mission of the organization. Currently, many organization worldwide are heavily depend on different types of Information Technology (IT) to achieve their missions with efficient and effectively. Regarding to this unlimited use of technology, there are some problems which can directly or indirectly affecting various operations in the organization. Disasters are any occurrence that can cause an interruption of a critical organization's operations for unspecified period of time whereby the disasters effects can sometimes disrupt the organization completely. Categorization of system criticality guideline helps the organization to have a prepared rank for their organization's assets. Many organizations have tried to develop their own system criticality guideline but they do not have a systematic approach to follow. Therefore, this study will propose a categorization of system criticality guideline which is designed specifically for Universiti Teknologi Malaysia (UTM) Health Centre to be used as a guidance to categorize and prioritize their critical resources. The proposed guideline consists of nine (9) phases which include Understand the Organization and Analyze Process, Recognize Organizational Resources, Classify Systems and Functions, Identify Critical Resources and functions, Prioritize Critical Resources and Functions, Develop Recovery Time Strategies, Develop Responsibility Charts, Guideline Maintenance Process and Approve and Implementation. The proposed guideline was validated by three (3) experts through distributed-interview-questionnaire and the proposed guideline was improved regarding to their suggestions and recommendations.

ABSTRAK

Pengkategorian tahap sistem kritikal merupakan satu pendekatan pengenalan dan pengelasan aset berdasarkan kepentingan dan kesan kehilangannya kepada misi organisasi. Pada masa kini, setiap organisasi di dunia bergantung sepenuhnya kepada pelbagai jenis teknologi maklumat (IT) bagi memastikan misi mereka dapat dicapai dengan cekap dan berkesan. Mengenai penggunaannya yang menyeluruh, terdapat beberapa masalah yang secara langsung atau tidak langsung mengancam operasi organisasi. Bencana merupakan sebarang kejadian yang boleh menyebabkan gangguan operasi organisasi kritikal bagi tempoh yang tidak ditentukan di mana kesan bencana tersebut boleh menyebabkan organisasi lumpuh dengan serta-merta. Pengkategorian sistem secara kritikalnya mengariskan panduan untuk membantu organisasi menyediakan kategori bagi aset mereka. Terdapat pelbagai organisasi yang cuba untuk membangunkan garis panduan sistem kritikal mereka sendiri tetapi mereka tidak mempunyai pendekatan sistematik untuk diikuti. Dengan demikian, kajian ini akan mencadangkan pengkategorian garis panduan sistem kritikal yang direkabentuk khusus untuk Pusat Kesihatan Universiti Teknologi Malaysia (UTM) yang akan digunakan sebagai panduan untuk mengkategorikan dan mengutamakan sumber kritikal mereka. Garis panduan yang dicadangkan terdiri daripada sembilan (9) fasa yang terdiri daripada Memahami Organisasi dan Analisis Proses, Mengenali Sumber Organisasi, Sistem Mengklasifikasi dan Fungsi, Sumber Mengenalpasti Kritikal dan fungsi, keutamaan Sumber Kritikal dan Fungsi, Membangunkan Strategi Masa Pemulihan, Membangunkan Carta Tanggungjawab, Proses Garis Panduan Penyelenggaraan dan meluluskan dan Pelaksanaan. Garis panduan yang dicadangkan telah disahkan oleh tiga (3) orang pakar melalui temuramah dan soal selidik yang diedarkan dan hasilnya telah dipertingkatkan berdasarkan cadangan dan syor-syor mereka.